### PATENT COOPERATION TREATY

## **PCT**

# TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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	agent's file referer	nce	SOP ECOTION ACTION			
OP040006 International application No.			International filing date (day/month/year)		See Form PCT/IPEA/416  Priority date (day/month/year)	
	2005/004		10.03.2005		16.03.2004	
International Pa	_	on (IPC) or natio	onal classification and IPC			
Applicant						
	DATA LAB	ORATORI	ES INC.			
1. This under	report is the inter Article 35 and tr	rnational prelim	inary examination report, establi applicant according to Article 36	ished by this Into	ernational Preliminary Examining Authority	
2. This I	REPORT consists	s of a total of _	sh	neets, including ti	his cover sheet.	
3. This r	eport is also acco	ompanied by AN	NEXES, comprising:			
a. D	(sent to the	applicant and t	o the International Bureau) a tota	al of 12	sheets, as follows:	
	sheets sheets	s of the descript	ion, claims and/or drawings whic	ch have been ame	ended and are the basis for this report and/or 70.16 and Section 607 of the Administrative	
	sheets	s which supersed	de earlier sheets, but which this .	Authority consid	ers contain an amendment that goes beyond	
	Box.	SCIOSULE III THE	тегнанопаг аррисаноп аs med	l, as indicated in	item 4 of Box No. I and the Supplemental	
b	sent to the	International B	ureau only) a total of (indicate ty	pe and number o	f electronic carrier(s))	
					containing a sequence listing and/or tables	
	related thereto Section 802 o	o, in computer of the Administra	readable form only, as indicated ative Instructions).	in the Suppleme	ental Box Relating to Sequence Listing (see	
4. This re	eport contains inc	dications relatin	g to the following items:			
$\boxtimes$	Box No. I	Basis of the r	eport			
	Box No. II	Priority				
	Box No. III	•	nment of opinion with regard to n	ovalty inventive	estan and industrial analizability	
	Box No. IV			oveny, myemiye	step and industrial applicability	
		Lack of unity  Reasoned state			****** A*	
	Box No. V	citations and	explanations supporting such stat	egard to noverty, ement	inventive step or industrial applicability:	
Ц	Box No. VI	Certain docu	nents cited			
	Box No. VII	Certain defec	ts in the international application			
	Box No. VIII	Certain obser	vations on the international applic	cation		
Date of submiss	sion of the demand	d	Date of cor	mpletion of this r	eport	
				1		
Name and mailing address of the IPEA/JP			Authorized	officer		
Facsimile No.			Telephone 1	No.		

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/004190

Box	No. I	[	Basis of the report					
1.	With indic	n regard cated un	to the language, this report is based on the internation der this item.	nal application in the language in wl	hich it was filed, unless otherwise			
		This rewhich	eport is based on translations from the original langua; is the language of a translation furnished for the purp	ge into the following languageoses of:				
		i	nternational search (Rule 12.3 and 23.1(b))					
			oublication of the international application (Rule 12.4)	j				
		L i	nternational preliminary examination (Rule 55.2 and/	or 55.3)				
2.	recei	n regard iving Of report):	to the elements of the international application, this in the fice in response to an invitation under Article 14 are	report is based on (replacement she referred to in this report as "orig	vets which have been furnished to the ginally filed" and are not annexed to			
		the into	ernational application as originally filed/furnished					
	$\boxtimes$	the des	ecription:					
		pages	1-43		as originally filed/furnished			
		pages*		received by this Authority on				
		pages*		received by this Authority on				
	$\boxtimes$	the clai	ms:					
		nos.	13-19,30-36,47-53		as originally filed/furnished			
		nos.*		as amended (together w	eith any statement) under Article 19			
		nos.#	2,7,9,11,12,20,24,26,28,29,37,41, 43,45,46,54	received by this Authority on 0				
		nos.*		· · · · · ·				
	X	the dra			· · · · · · · · · · · · · · · · · · ·			
•		sheets	fig. 1-50					
		sheets*			as originally filed/furnished			
		sheets*		-				
í				received by this Authority on				
			nce listing and/or any related table(s) – see Suppleme	ntal Box Relating to Sequence Listi	ng.			
3.		The am	endments have resulted in the cancellation of:					
	;	L tł	ne description, pages					
	;	tł	the claims, nos. 1,3-6,8,10,21-23,25,27,38-40,42,44					
		tł	ne drawings, sheets/figs					
		L] th	ne sequence listing (specify):					
		aı	ny table(s) related to sequence listing (specify):					
4.		This rep	port has been established as if (some of) the amendance been considered to go beyond the disclosure as file	nents annexed to this report and listed, as indicated in the Supplemental	ted below had not been made, since Box (Rule 70.2(c)).			
		L th	ne description, pages					
	į	th	ne claims, nos.		· · · · · · · · · · · · · · · · · · ·			
			ne drawings, sheets/figs					
			ne sequence listing (specify):					
	i		ny table(s) related to sequence listing (specify):					
*	If iten	n 4 appl	ies, some or all of those sheets may be marked "super	seded."				

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/004190

Box	x No. V Reasoned statem citations and exp	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
1.	Statement	•						
	Novelty (N)	Claims	<u>13-19, 30-36, 47-53</u>	_ YES				
		Claims	2, 7, 9, 11, 12, 20, 24, 26, 28, 29, 37, 41, 43, 45, 46, 54	NO				
	Inventive step (IS)	Claims		YES				
		Claims	2, 7, 9, 11-20, 24, 26, 28-37, 41, 43, 45-54	NO				
	Industrial applicability (IA)	Claims	2, 7, 9, 11-20, 24, 26, 28-37, 41, 43, 45-54	YES				
		Claims		NO				

#### 2. Citations and explanations (Rule 70.7)

Document 1: R. SEDGEWICK, as translated by Kohei NOSHITA et al., Algorithm, Vol. 1 = Kiso/Seiretsu, first edition, Kindai Kagaku Sha, 1990, pages 39 to 55

Document 2: JP 10-240741 A (Nippon Telegraph And Telephone Corp.), 11 September 1998, paragraphs [0001] to [0006] and fig. 3 to 5

The inventions set forth in claims 2, 9, 12, 20, 26, 29, 37, 43, 46 and 54 are presented in document 1 (pages 39 to 55) and document 2 (paragraphs [0001] to [0006]) cited in the international search report; therefore, the inventions in question lack novelty and do not involve an inventive step.

Document 1 (in particular, refer to page 48 and fig. 4.6) and document 2 (in particular, refer to paragraph [0006] and fig. 5) present techniques wherein each non-root node is associated with the parent node of said non-root node. Furthermore, document 1 (in particular, refer to fig. 4.12) and document 2 (in particular, refer to fig. 5) present search techniques wherein the nodes in the same generation are given priority over the child nodes.

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The inventions set forth in claims 7, 11, 24, 28, 41 and 45 lack novelty in the light of document 1, and do not involve an inventive step in the light of documents 1 and 2. Document 1 (in particular, refer to fig. 4.9) presents a search technique wherein the child nodes are given priority over the nodes in the same generation.

The inventions set forth in claims 13, 14, 30, 31, 47 and 48 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report. Documents 1 and 2 do not mention selecting either a depth-first mode or a breadth-first mode. However, techniques for selecting a mode from among a plurality of modes are well known, and thus it would have been easy for a person skilled in the art to apply such a technique.

The inventions set forth in claims 15 to 19, 32 to 36 and 49 to 53 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report. Documents 1 and 2 do not disclose a method for converting the form of the tree structure. However, techniques for converting the form of a tree structure are well known, and thus it would have been easy for a person skilled in the art to apply such a technique.